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A61F 13/42

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A5R RPV

(56) Documents Cited
GB 2183160 A EP 0021492 A1 WO 94/10958 A1
US 4931051 A US 4738674 A US 4507121 A
US 4327731 A US 4192311 A US 3952746 A
US 3918454 A

(58) Field of Search
UK CL (Edition O) A5R RPV
INT CL⁶ A61F 13/42

(54) Abstract Title
Disposable nappy with wetness indicator

(57) The nappy comprises an outer covering 2, an inner covering 3 and wadding 4 and includes a thin strip 6 of absorbent paper or like material with high capillary action connecting to an indicator 5 which changes colour on contact with liquid to show that the nappy is ready for changing. The indicator may be visible through a panel 7.

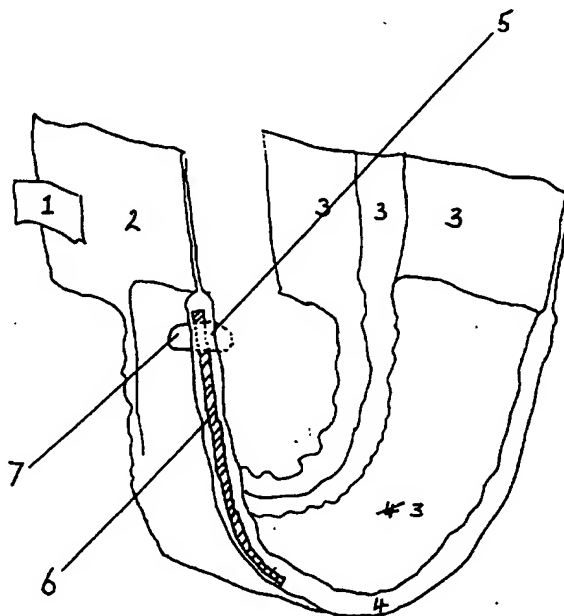


FIGURE 2

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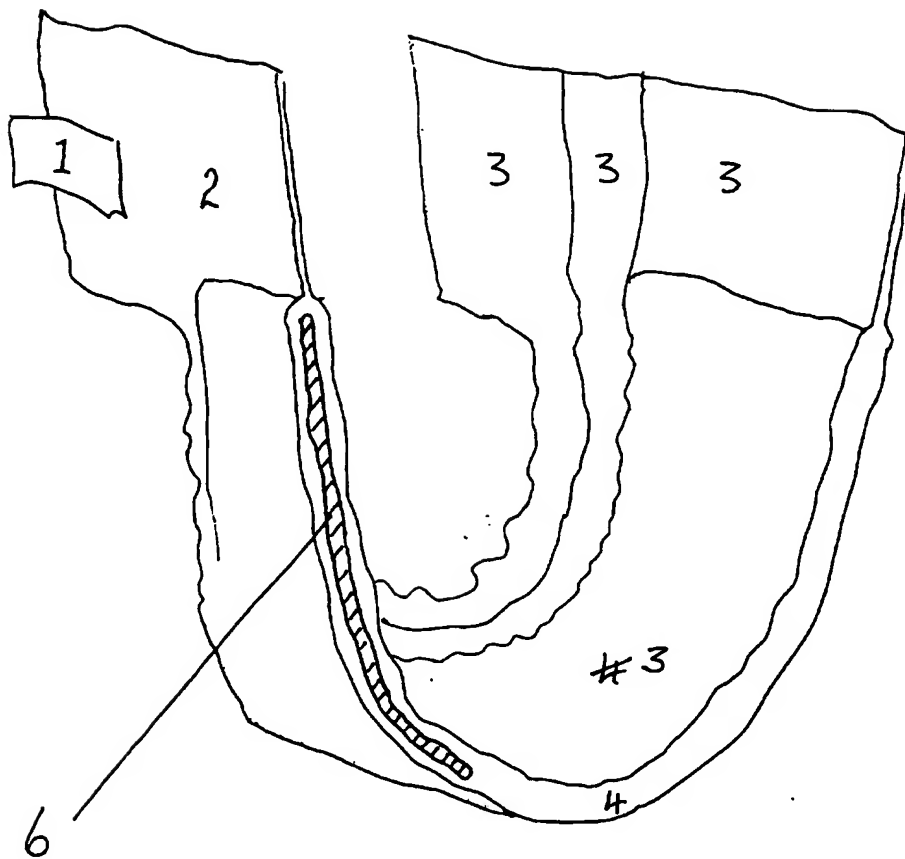


FIGURE 1

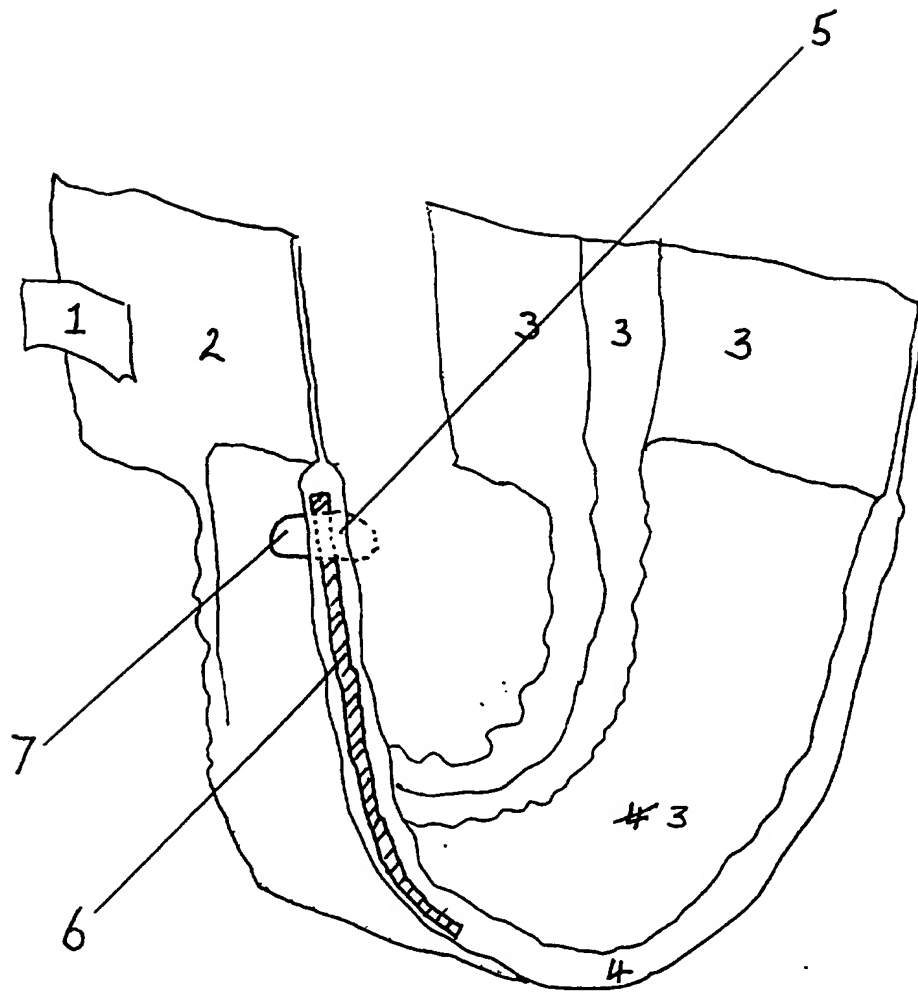


FIGURE 2

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FRONT

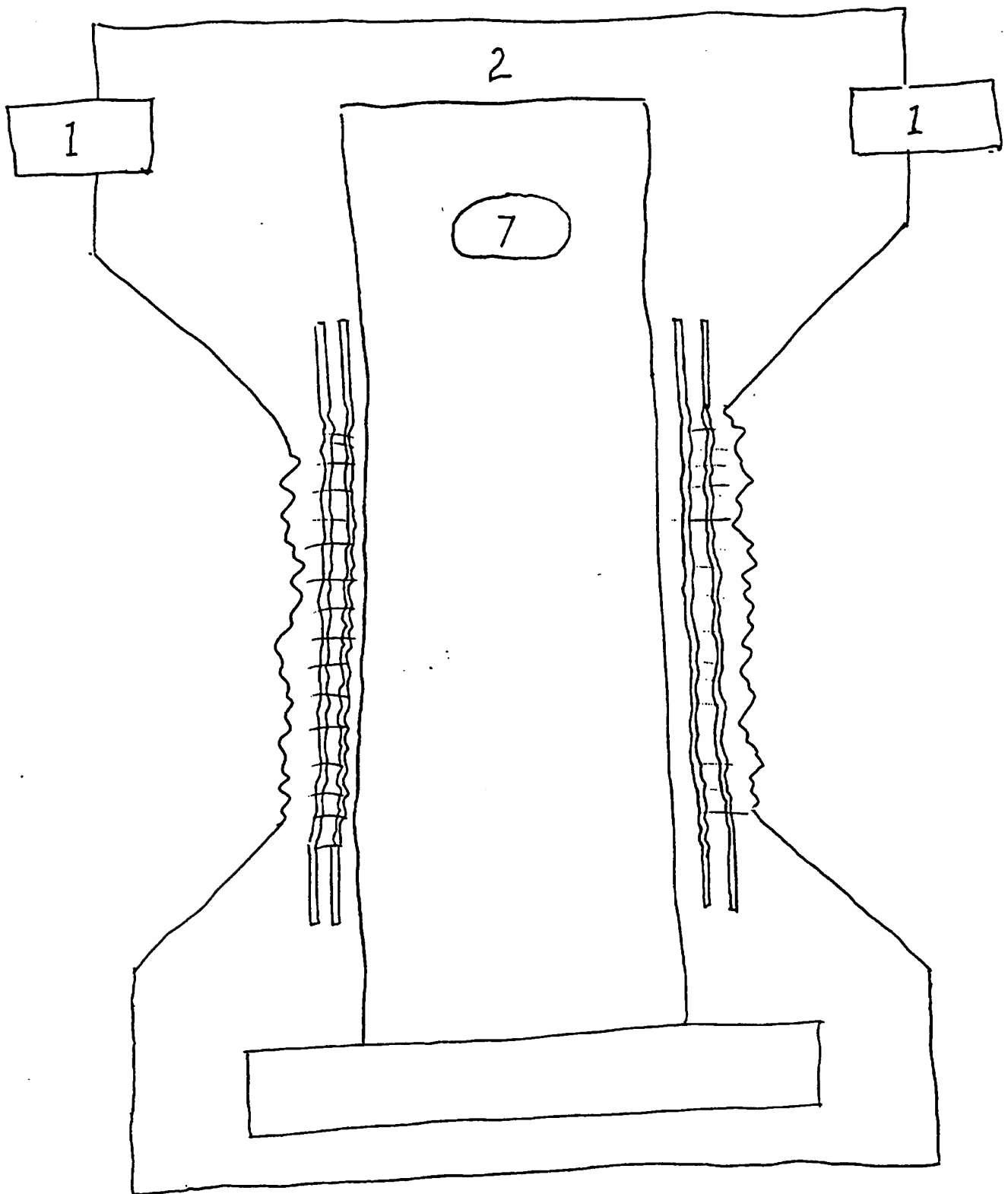


FIGURE 3

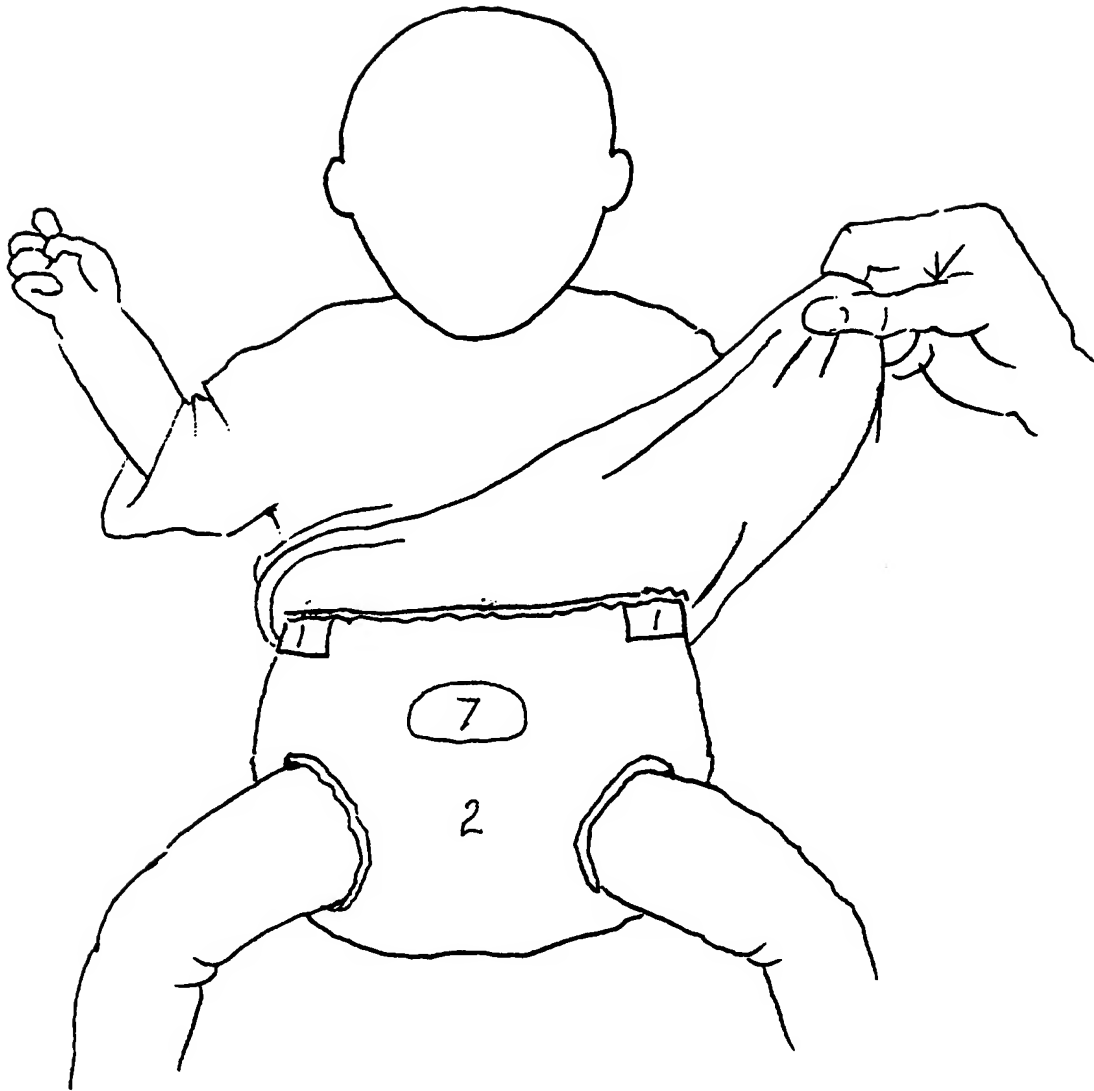


FIGURE 4

DISPOSABLE INDICATOR NAPPY (DI-NAPPY)

This invention relates to a disposable indicator nappy.

Disposable nappies are well known pads consisting of wadding covered in a net-like material to collect body waste from babies or incontinent people or animals. They fit between the legs and fasten at the waist. It is not always possible to be absolutely sure if a nappy has been soiled.

The DI-nappy contains in addition to the wadding and cover a thin strip of absorbent paper/material, i.e. any paper/material or other substance which will enhance capillary action, which is in contact with a visible indicator. This indicator is positioned on the front side of the DI-nappy (as shown in Figure 3) so as to be readily visible without undoing the DI-nappy.

When the nappy is wet the liquid is absorbed into the wadding, comes into contact with the absorbent paper/material and, in turn, because of the capillary action of moisture, travels up the absorbent paper/material and comes into contact with the indicator. When the liquid comes into contact with the indicator, the indicator changes colour thereby giving a clear indication when the DI-nappy is ready for changing.

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawing in which:-

Figure 1 is a dissection of the DI-Nappy showing the positioning of the absorbent paper/material;

Figure 2 shows the position of the indicator in relation to the absorbent paper/material in the DI-Nappy.

Figure 3 shows the position of the indicator panel on the front-side of the DI-Nappy.

Figure 4 shows the position of the indicator panel when the DI-Nappy is worn by a baby.

In Figure 1 the position of the fastener 1, the outside covering 2, the inside covering 3, the wadding 4 and the absorbent material 6 is shown. Figure 2 shows in addition the indicator 5 and the indicator panel 7.

CLAIMS

1. The Disposable Indicator Nappy (DI-Nappy) comprises wadding, a thin strip of absorbent paper/material to enhance capillary action, a connecting indicator which changes colour on contact with liquid and a cover.
2. The Disposable Indicator Nappy (DI-Nappy) in Claim 1 wherein the indicator is positioned in such a way as to be readily visible without removing the DI-nappy. In the technical features the front of the DI-Nappy has been mentioned as being the most logical position and this is shown in Figure 3.
3. The DI-Nappy in Claims 1 or 2 wherein the indicator will obviate the need to change the DI-Nappy unnecessarily.
4. A DI-Nappy as claimed in any preceding claim, wherein a strip or strips or layers of absorbent paper/material which will enhance capillary action however positioned is/are in contact with an indicator.
5. A DI-Nappy as claimed in any preceding claim wherein an indicator is placed in any position as well as or other than at the front.



Application No: GB 9715364.7
Claims searched: 1-5

Examiner: L.V.Thomas
Date of search: 10 November 1997

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.O): A5R (RPV)

Int CI (Ed.6): A61F 13/42

Other: -

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2183160 A (WILLIAMS) see p.1 ll.48-84 and p.2 ll.4-10	1-5
X	EP 0021492 A1 (PROCTER & GAMBLE) seep.4 ll.15-29	1-5
X	WO 94/10958 A1 (MITCHELL) see p.6 l.32 - p.7 l.23 and p.8 ll.22-33	1-5
X	US 4931051 (CASTELLO) see col.2 ll.3-13 and col.2 l.30 - col.3 l.11	1-5
X	US 4738674 (TODD ET AL.) see col.3 l.46 - col.4 l.27 and col.5 l.50 - col.6 l.8	1-5
X	US 4507121 (LEUNG) see col.1 ll.36-46, col.2 ll.18-39 and col.3 ll.14-37	1-5
X	US 4327731 (POWELL) see col.2 ll.30-39, col.3 ll.19-32 and col.5 ll.56-68	1-5
X	US 4192311 (FELFOLDI) see col.1 ll.31-56 and col.2 l.66 - col.3 l.7	1-5
X	US 3952746 (SUMMERS) see col.1 l.33 - col.2 l.11	1-5

X Document indicating lack of novelty or inventive step
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A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier than, the filing date of this application.



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Application No: GB 9715364.7
Claims searched: 1-5

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Category	Identity of document and relevant passage	Relevant to claims
X	US 3918454 (KORODI ET AL.) see col.2 ll.8-33	1-5

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
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